

# CHRYSO®Optima 181

New Generation Superplasticizer

## DESCRIPTION

**CHRYSO®Optima 181** is a new generation superplasticizer based on polycarboxylate and modified phosphonate. Its specifically designed molecular structure enables the concrete manufacturer to produce cohesive, low viscous concrete with long workability retention.

CHRYSO®Optima 181 has been developed to maintain fresh concrete workability without compromising the setting time.

## BENEFITS

- CHRYSO®Optima 181 allows concrete with an important workability to be obtained, while reducing the water/cement ratio.
- The dispersion properties of CHRYSO®Optima 181 allow the user to optimise the cement content when a specified mechanical strength is required.
- On account of all these characteristics, CHRYSO®Optima 181 is a superplasticizer which is particularly adapted for used on construction sites and in the ready-mix concrete industry.
- Proprietary molecule reduces concrete viscosity (stickiness) allowing for easier placement, better finish and enhanced pumpability.

## SPECIFICATIONS

<b>Product Nature</b>	liquid
<b>Color</b>	Colourless to light yellow
<b>Lifetime</b>	12 months
<b>Cl<sup>-</sup> ions content</b>	≤ 0,010 %
<b>Specific gravity</b>	1,080 ± 0,020
<b>pH</b>	5,00 ± 2,00

nil to EN 934 and BS 5075 It does not contain any purposely added calcium chloride or other chloride based components.

## PACKAGING

- 200 L drum
- IBC 1000L

## METHOD OF USE

- A 1.0% dosage of the product of the weight of cement is commonly used.

CHRYSO®Optima 181 can be added to the water before mixing the concrete. However, it can be added to the concrete after mixing. Because local job conditions vary, please contact your local CHRYSO sales representative for further assistance if using outside recommended dosage ranges.

### Dosage :

0.05 to 3.0 kg for 100 kg of cement.

Dosage rate of CHRYSO®Optima 181 are dependent upon desired concrete performance characteristics and variables including cement quality and chemistry, concrete temperature and curing conditions.

### Consumption :

CHRYSO®Optima 181 is compatible with all types of Portland cement, class C and F fly ash, slag, microsilica, calcium chloride, fibers and approved air entraining admixtures.

CHRYSO®Optima 181 is recommended for all concrete mixes where water content, improved cementitious material performance, high workability retention and very high strengths characteristics are desirable.

1. All types of cement
2. Heavy prefabrication
3. High performance concrete, ultra high performance concrete
4. Pre-stressed concrete
5. Ready-mix concrete
6. Concrete of humid, plastic or fluid consistency
7. Concrete with long workability retention
8. High strength concrete with workability retention
9. Compatible with Micro silica, GGBS and Fly Ash.
10. Extended workability concrete
11. White or pale concrete

## PRECAUTIONS

- Do not mix with other products without advice from manufacturers.
- Store in plastic containers, PVC excluded.

## TECHNICAL DATA SHEET

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Chryso  
Concrete  
Solutions

14/10/2024

### SAFETY

Prior to any use, please read carefully the Material Safety Data Sheets.

The information contained in this document is given to the best of our knowledge and is the result of extensive and controlled testing. However, it cannot under any circumstances be considered as a warranty involving our liability in the case of misuse. Tests should be conducted before the product is used to ensure that the methods and conditions of use of the product are satisfactory. Our specialists remain at the disposal of customers if they require help with the application of the product for their specific needs. [www.chryso.lk](http://www.chryso.lk)  
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